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ABSTRACT

A basic-skills testing remediation model for older, reentry college juniors was studied longitudinally and cross-validated against previous findings. Attention was directed to the rates of academic success and attrition for students entering an upper-division university in 1981 as juniors and seniors and majoring in business administration. The outcomes for this population were compared to those of students entering college in 1980. Both groups were studied for 3 years. Skills were assessed by the "Test of Standard Written English and by algebra tests of the "Descriptive Tests of Mathematics Skills." Students not meeting minimum competency levels were required to pass English or mathematics courses. Of 138 juniors and seniors entering in 1981, 95 met requirements of the test remediation policy by passing the examinations and/or equivalent courses. Students meeting the basic skills requirements had higher grade point averages and lower attrition rates than those not meeting the requirements. (SW)

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A LONGITUDINAL CROSS VALIDATION OF A BASIC SKILLS TESTING REMEDIATION PARADIGM FOR OLDER, REENTRY COLLEGE JUNIORS

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For adult reentry juniors, the basic skills requisites in English and mathematics, prerequisites to challenging the curriculum, should be validated. If the students do not demonstrate these skills, they should be required to remediate their deficiency. These conclusions are based upon the 1980 three year longitudinal study cross validated by the 1981 three year longitudinal analysis. Succinctly, students meeting their basic skills requirements, in comparison to those not demonstrating these minimal competencies, had significantly higher rates of academic success; i.e., cumulative grade point averages of 2.0 or higher on a 4.0 grading scale, and lower rates of attrition.

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A LONGITUDINAL CROSS VALIDATION OF A BASIC SKILLS TESTING REMEDIATION PARADIGM FOR OLDER, REENTRY COLLEGE JUNIORS

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At an upper-division university, a basic skills testing remediation model has been operational in the College of Business and Public Administration for over a decade. English skills are assessed by the Test of Standard Written English (Educational Testing Service, 1974-1978) with the national norming median being the minimum level of competency. Students not passing the test were required to pass an English class. An evaluation of the verbal component of the program demonstrated that academic success was highest for students passing the test, lower for students not passing the test but meeting the basic skills requirement through an equivalent course, and lowest for those yet to meet the requirement (Suddick, 1981, 1982). Mathematics skills are assessed by the algebra examinations of the Descriptive Tests of Mathematics Skills (Educational Testing Service, 1979). Students not earning at least a raw score of 21 on the Elementary Algebra Skills test and at least a raw score of 15 on the Intermediate Algebra Skills test were required to pass an algebra course before enrolling in calculus and statistics classes. Remediation was found to be successful (Suddick and Collins, 1982, 1984b).

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The singular evaluation of the components of the program was expanded to a three year long longitudinal study (Suddick and Collins, 1984a). Per the criteria of attrition and of grades, it was found that students who had met the basic skills requirements, in comparison to those who had not, had a 66 percent higher rate of academic success and a 54 percent lower rate of attrition.

The heretofore trends were based upon students entering the institution in the fall term of 1980. The objectives of this study were to validate the reported findings with data based upon the students who entered the institution in 1981.

Method

In the fall term of 1981, 138 juniors and seniors majoring in business administration entered the institution. These students were followed for three years. Using the Suddick and Collins (1984) methodology, 106 students, 77 percent, met with academic success in that their cumulative grade point average was 2.0 or higher on a 4.0 scale. The attrition rate of the population was 50 percent; i.e., students who had not enrolled in the first two academic terms of 1984 and who had not been graduated. Finally, 95 students, 69 percent, had met both requirements of the test remediation policy by passing the examination(s) and/or equivalent course(s).

Results

The attrition rate for the 43 students not meeting the basic skills requirements was 98 percent compared to 28 percent for the

95 students meeting the requirements. The difference, 70 percent, was statistically significant ($t_{136} = 7.54$, $p < 0.001$).

Regarding academic success, 91 percent of the students meeting the basic skills requirements versus 56 percent of those not meeting the requirements were academically successful; i.e., had a minimal C average on an A to F scale. The difference, 35 percent, was significant ($t_{136} = 4.70$, $p < 0.001$).

As with the 1980 population, it was found that students meeting their basic skills requirements had higher rates of academic success than the other students; i.e., a difference of 66 percent for the 1980 population and a difference of 56 percent for the 1981 population. Similar trends were found to be the case for attrition. In comparison to those meeting their basic skills requirements, students not meeting these requirements had a higher attrition rate; specifically, 54 percent for the 1980 population and 70 percent for the 1981 group.

Presented in Table 1 are the 1980 and 1981 minimal grade rate and attrition rate data for students meeting and not meeting their basic skills requirements. For all four comparisons, the difference in percentages were not found to be statistically significant ($p > 0.05$), in fact, the p level of significance ranged from 0.25 to 0.95.

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Insert Table 1

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Discussion

Suddick and Collins (1984a) concluded that demonstration of basic skills to challenge the curriculum is a requisite for academic success of returning adult college students and that students having minimum competencies tend to continue pursuit of their academic degree programs. These 1980 longitudinal trends were cross validated for 1981 students; i.e., the rates of academic success and attrition were found to be consistent for independent populations. Thus, the empirical evidence strongly supports the position that the academic basic skills of older, reentry college students should be verified and the requisites to challenge the curriculum be required to enhance academic success and lower attrition.

TABLE 1

Summary of Grade and Attrition Rate Comparisons for Students Meeting and Not Meeting Their Basic Skills Requirements

	Year		t-test		
Comparison	1980	1981	value	df	p-level
Basic skills met:					
2.0 on 4.0 scale	131 of 146 (89.7%)	87 of 95 (91.6%)	0.48	239	0.50
Attrition	42 of 146 (28.8%)	27 of 95 (28.4%)	0.06	239	0.95
Basic skills not met:					
2.0 on 4.0 scale	26 of 73 (35.6%)	19 of 43 (44.2%)	0.91	114	0.50
Attrition	67 of 73 (91.8%)	42 of 43 (97.7%)	1.29	114	0.25

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